

Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 2004P10907	FOR FURTHER ACTION	See Form PCT/IPEA/416
International application No. PCT/JP2004/010378	International filing date (day/month/year) 14.07.2004	Priority date (day/month/year) 18.07.2003
International Patent Classification (IPC) or national classification and IPC B29C33/02, 35/02 // B29K105:24, B29L30H:00		
Applicant BRIDGESTONE CORPORATION		

<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>4</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> (sent to the applicant and to the International Bureau) a total of <u>3</u> sheets, as follows:</p> <p><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>																									
<p>4. This report contains indications relating to the following items:</p> <table><tr><td><input checked="" type="checkbox"/></td><td>Box No. I</td><td>Basis of the report</td></tr><tr><td><input type="checkbox"/></td><td>Box No. II</td><td>Priority</td></tr><tr><td><input type="checkbox"/></td><td>Box No. III</td><td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td></tr><tr><td><input type="checkbox"/></td><td>Box No. IV</td><td>Lack of unity of invention</td></tr><tr><td><input checked="" type="checkbox"/></td><td>Box No. V</td><td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td></tr><tr><td><input type="checkbox"/></td><td>Box No. VI</td><td>Certain documents cited</td></tr><tr><td><input type="checkbox"/></td><td>Box No. VII</td><td>Certain defects in the international application</td></tr><tr><td><input type="checkbox"/></td><td>Box No. VIII</td><td>Certain observations on the international application</td></tr></table>		<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input type="checkbox"/>	Box No. VII	Certain defects in the international application	<input type="checkbox"/>	Box No. VIII	Certain observations on the international application
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Date of submission of the demand	Date of completion of this report																								
Name and mailing address of the IPEA/JP	Authorized officer																								
Facsimile No.	Telephone No.																								

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2004/010378

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This report is based on translations from the original language into the following language _____, which is the language of a translation furnished for the purposes of:

- ☐ international search (Rule 12.3 and 23.1(b))
☐ publication of the international application (Rule 12.4)
☐ international preliminary examination (Rule 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):

☐ the international application as originally filed/furnished

☒ the description:

pages 1-3, 5-8 as originally filed/furnished

pages* 4, 4/1 received by this Authority on 17.05.2005

pages* _____ received by this Authority on _____

☒ the claims:

nos. 2 as originally filed/furnished

nos.* _____ as amended (together with any statement) under Article 19

nos.* 1, 3 received by this Authority on 17.05.2005

nos.* _____ received by this Authority on _____

☒ the drawings:

sheets Fig. 1-7 as originally filed/furnished

sheets* _____ received by this Authority on _____

sheets* _____ received by this Authority on _____

☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

☐ the description, pages _____

☐ the claims, nos. _____

☐ the drawings, sheets/figs _____

☐ the sequence listing (*specify*): _____

☐ any table(s) related to sequence listing (*specify*): _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

☐ the description, pages _____

☐ the claims, nos. _____

☐ the drawings, sheets/figs _____

☐ the sequence listing (*specify*): _____

☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2004/010378

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1. Statement			
Novelty (N)	Claims	<u>3</u>	YES
	Claims	<u>1, 2</u>	NO
Inventive step (IS)	Claims		YES
	Claims	<u>1-3</u>	NO
Industrial applicability (IA)	Claims	<u>1-3</u>	YES
	Claims		NO
2. Citations and explanations (Rule 70.7)			
<p>Document 1: JP 2001-205634 A (Mitsubishi Heavy Industry, Ltd.), 31 July 2001; paragraphs [0018], [0019] and [0028] and fig.</p>			
<p>Claim 1</p>			
<p>Document 1 discloses a tyre mould which has an upper spring bearing member (41), an elastic member (43) and a lower spring bearing member (42) inside the outer ring (13), and the upper surface surrounding the first spring bearing member touches the lower surface of the bolster plate (3) via a distance ring. As the action of said invention it is claimed that when the bolster plate is raised after closing the mould, the outer ring is pulled towards the bottom plate by the force opposing the compression of the elastic member, and a strong centripetal mould tightening force is exerted on the segment through the inclined inner circumferential surface of the outer ring and the inclined outer circumferential surface of the segment.</p>			
<p>The "upper spring bearing + distance ring", "outer ring + lower spring bearing" and "elastic member" disclosed in document 1 are equivalent to a "spacer ring", "outer ring" and "biasing member" in the</p>			

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Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement

inventions in the present application. The elastic member disclosed in document 1 also has a biasing force during vulcanisation which is substantially the same as the mould tightening force, and the bolster plate causes the outer ring to move axially via the upper spring bearing.

Therefore, the split type vulcanising mould described in claim 1 in the present application does not differ from the invention disclosed in document 1.

Claim 2

According to the drawings, the elastic member (biasing means) is also deemed to be subjected beforehand to a certain pressure in the invention disclosed in document 1.

Claim 3

Since the feature of mould tightening by means of a biasing member is shared between claim 3 in the present application and the invention disclosed in document 1, optimization of the relationship between the deflection of the biasing means and the mould tightening force is within the ordinary competence of a person skilled in the art.